Bottom drag coefficient on the influence of the saltwater spilling over from the north branch in Changjiang estuary in China

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Usually, the bottom drag coefficient Cd is specified to match the law of the wall in the bottom logarithmic layer where the water is neutrally stratified in many 3-dimensional ocean models. However, current natural water depth is only 2–4 meters in the upper and middle reaches of the North Branch in Changjiang Estuary in China. There are many tidal flat in the channel and the tidal range up to about 4 m. In the ebb, many shoals will come out of the water. In this case, the vertical stratification has not much significance. So we transformed three-dimensional computational methods into two-dimensional using formula of Chézy-manning in North Branch. In this way, it can greatly enhance the calculation precision of saltwater spill over from the north branch.

Biography
Hanghang Lyu is a Postgraduate student of East China Normal University, China. His major is Estuary and Coastal Research and currently pursuing Doctor's degree.

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